

P **Mahonia aquifolium**

Common Name(s)

Blue Barberry, Holly Barberry, Holly Mahonia, Mountain Grape, Oregon Grape

How Used

M

	Chemical Plant Part	Low PPM	High PPM	StdDev	Reference Citation
4	(+)-SYRINGARESINOL	Bark	--	28	Wirth, C., Wagner, H. 1997. Pharmacologically Active Phenolic Compounds from the Bark of <i>Mahonia aquifolium</i> . <i>Phytomedicine</i> , 4(4): 357-358.
0	3-HYDROXY-4-METHOXYPHENYLETHYL-ALCOHOL	Bark	--	116	Wirth, C., Wagner, H. 1997. Pharmacologically Active Phenolic Compounds from the Bark of <i>Mahonia aquifolium</i> . <i>Phytomedicine</i> , 4(4): 357-358.
0	AQUIFOLINE	Root	--	365	Kostalova, D., Uhrin, D., Hrochova, V., Tomko, J. 1987. A new bisbenzylisoquinoline alkaloid from <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>Collect Czech Chem Commun</i> , 52(1): 242-246.
2	AROMOLINE	Root	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>III. Chem Pap</i> , 40(3): 389-394.
2	AROMOLINE	Seed	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>III. Chem Pap</i> , 40(3): 389-394.
0	BALUCHISTINE	Root	--	40	Kostalova, D., Uhrin, D., Hrochova, V., Tomko, J. 1987. A new bisbenzylisoquinoline alkaloid from <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>Collect Czech Chem Commun</i> , 52(1): 242-246.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
38	BERBAMINE		Shoot	--	--
					Khusainova, K. S. and Sadykov, Y. D. 1986. Alkaloids from Aerial Parts of <i>Mahonia aquifolium</i> . Izv Akad Nauk Tadzh Ssr Otd Fiz Mat Khim Geol Nauk, 1: 41-46.
38	BERBAMINE		Bark	--	--
38	BERBAMINE		Leaf	--	31
					Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
38	BERBAMINE		Seed	--	--
					Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. III. Chem Pap, 40(3): 389-394.
38	BERBAMINE		Root	--	--
38	BERBAMINE		Wood	--	--
					Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
130	BERBERINE		Root	--	--
130	BERBERINE		Plant	--	--
130	BERBERINE		Leaf	--	13
				-1	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
130	BERBERINE		Bark	--	--
130	BERBERINE		Wood	--	--
					Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
130	BERBERINE		Shoot	--	--

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
130	BERBERINE	Root	--	--	Kukic, P., Nikolic, R., Gorunovic, M. 1972. Comparative Pharmacognostic Study of Berberis (Barberry) vulgaris and Berberis aquifolium. <i>Acta Pharm Jugosl</i> , 22: 19-24.
1	CANADINE	Plant	--	--	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
7	COLUMBAMINE	Plant	--	--	
7	COLUMBAMINE	Root	--	--	Kostavolva, D., Brazdovicova, B., Tomko, J. 1981. Isolation of Quaternary Alkaloids from <i>Mahonia aquifolium</i> (Pursh) Nutt. I. Chem Zvesti, 35: 279-283.
7	COLUMBAMINE	Bark	--	--	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
6	CORYDINE	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
6	CORYDINE	Leaf	--	29	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
2	CORYPALMINE	Plant	--	--	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
3	CORYTUBERINE	Leaf	--	4300	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
3	CORYTUBERINE	Bark	--	--	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
3	CORYTUBERINE	Wood	--	--	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
3 CORYTUBERINE	Plant	--	--		
16 HYDRASTINE	Root	--	--		
5 ISOBOULDINE	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
5 ISOBOULDINE	Leaf	--	23		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
5 ISOCORYDINE	Leaf	--	26		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
5 ISOCORYDINE	Bark	--	--		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
5 ISOCORYDINE	Wood	--	--		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
5 ISOCORYDINE	Plant	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
5 ISOCORYDINE	Flower	--	--		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
11 ISOTETRANDRINE	Seed	--	--		Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. III. Chem Pap, 40(3): 389-394.
11 ISOTETRANDRINE	Shoot	--	--		Khusainova, K. S. and Sadykov, Y. D. 1986. Alkaloids from Aerial Parts of <i>Mahonia aquifolium</i> . Izv Akad Nauk Tadzh Ssr Otd Fiz Mat Khim Geol Nauk, 1: 41-46.
13 JATRORRHIZINE	Plant	--	--		

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
13 JATRORRHIZINE	Shoot	--	--		
13 JATRORRHIZINE	Bark	--	--		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
13 JATRORRHIZINE	Root	--	--		Kostavolva, D., Brazdovicova, B., Tomko, J. 1981. Isolation of Quaternary Alkaloids from <i>Mahonia aquifolium</i> (Pursh) Nutt. I. Chem Zvesti, 35: 279-283.
11 MAGNOFLORINE	Leaf	--	1600		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
11 MAGNOFLORINE	Plant	--	--		
11 MAGNOFLORINE	Bark	--	--		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
11 MAGNOFLORINE	Root	--	--		Kostavolva, D., Brazdovicova, B., Tomko, J. 1981. Isolation of Quaternary Alkaloids from <i>Mahonia aquifolium</i> (Pursh) Nutt. I. Chem Zvesti, 35: 279-283.
11 MAGNOFLORINE	Wood	--	--		Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
0 MAHONINE	Plant	--	--		CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0 N-HEPTACOSAN-1-OL	Leaf Wax	--	--		Berg, V. S. 1985. Physical, Chemical and Spectral Properties of Leaf Surfaces of <i>Berberis aquifolium</i> (Pursh.). Plant Cell Environ, 8(9): 631-638.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
0	NONACOSAN-19-OL	Leaf Wax	--	--	Berg, V. S. 1985. Physical, Chemical and Spectral Properties of Leaf Surfaces of <i>Berberis aquifolium</i> (Pursh.). <i>Plant Cell Environ</i> , 8(9): 631-638.
4	OBAMEGINE	Root	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>III. Chem Pap</i> , 40(3): 389-394.
4	OBAMEGINE	Seed	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>III. Chem Pap</i> , 40(3): 389-394.
10	OXYACANTHINE	Seed	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>III. Chem Pap</i> , 40(3): 389-394.
10	OXYACANTHINE	Bark	--	--	Mulelr, K., Ziereis, K., Gawlik, I. 1995. The Antipsoriatic <i>Mahonia aquifolium</i> and its Active Constituents, II. Antiproliferative Activity Against Cell Growth of Human Keratinocytes. <i>Planta Medica</i> , 61(1): 74-75.
10	OXYACANTHINE	Shoot	--	--	Khusainova, K. S. and Sadykov, Y. D. 1986. Alkaloids from Aerial Parts of <i>Mahonia aquifolium</i> . <i>Izv Akad Nauk Tadzh Ssr Otd Fiz Mat Khim Geol Nauk</i> , 1: 41-46.
10	OXYACANTHINE	Plant	--	--	Galle, K., Muller-Jakic, B., Proebstle, A., Jurcic, K., Bladt, S., Wagner, H. 1994. Analytical and Pharmacological Studies on <i>Mahonia aquifolium</i> . <i>Phytomedicine</i> , 1(1): 59-62.
10	OXYACANTHINE	Root	--	--	
0	OXYBERBERINE	Seed	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. <i>III. Chem Pap</i> , 40(3): 389-394.
0	OXYBERBERINE	Plant	--	--	Misik, V., Bezakova, L., Malekova, L., Kostalova, D. 1995. Lipoxygenase Inhibition and Antioxidant Properties of Protoberberine and Aporphine Alkaloids Isolated from <i>Mahonia aquifolium</i> . <i>Planta Medica</i> , 61(4): 372-373.

Chemical Plant Part		Low PPM	High PPM	StdDev	Reference Citation
0	OXYBERBERINE	Root	--	--	Kostalova, D., Hrochova, V., Tomko, J. 1986. Tertiary Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. III. Chem Pap, 40(3): 389-394.
17	PALMATINE	Plant	--	--	
17	PALMATINE	Wood	--	--	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
17	PALMATINE	Leaf	--	13	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
17	PALMATINE	Root	--	--	Kostavolva, D., Brazdovicova, B., Tomko, J. 1981. Isolation of Quaternary Alkaloids from <i>Mahonia aquifolium</i> (Pursh) Nutt. I. Chem Zvesti, 35: 279-283.
17	PALMATINE	Shoot	--	--	
17	PALMATINE	Bark	--	--	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
0	RESIN	Plant	--	--	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	SCOULERINE	Bark	--	--	Slavik, J., Bochorakova, J., Kostalova, D., Hrochova, V. 1985. Alkaloids of <i>Mahonia aquifolium</i> (Pursh) Nutt. II. Chem Pap, 39(4): 537-542.
35	TANNIN	Plant	--	--	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
2	TETRAHYDROBERBERINE	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TETRAHYDROJATRORRHIZINE	Plant	--	--	J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.